

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims:

1. (currently amended) A method of automatic speech recognition (ASR), comprising:
 - providing a plurality of categories for different speech utterances;
 - receiving ground truths with correct text for the different speech utterances;
 - processing the different speech utterances at different ASR engines;
 - comparing output from each of the different ASR engines with the ground truths to determine ranks of the different ASR engines for accuracy in recognizing the different speech utterances;
 - assigning a different ASR engine to each category based on the ranks of the ASR engines to develop a ranking matrix;
 - receiving a first speech utterance from a first user;
 - analyzing characteristics of the first speech utterance to determine an age and a gender of the first user~~extracting characteristics about the first user from content of the first speech utterance to classify the first speech utterance into one of the categories; and~~
 - classifying the first speech utterance into one of the categories based on the age and gender of the first user; and
 - consulting the ranking matrix to select ~~selecting~~ a single one of the ASR engines assigned to the category to which the first speech utterance is classified to automatically recognize the first speech utterance.
2. (currently amended) The method of claim 1 wherein the ranking matrix is a table that defines which ASR engine or combination of ASR engines has a best accuracy for different ages and genders of users~~providing a plurality of categories for different speech utterances further comprises providing a male category and a female category~~.
3. (original) The method of claim 1 wherein assigning a different ASR engine to each category further comprises assessing accuracy of each ASR engine for each category.

4. (original) The method of claim 3 wherein assessing accuracy of each ASR engine for each category further comprises determining a least Word Error Rate of each ASR engine for each category.
5. (original) The method of claim 1 wherein assigning a different ASR engine to each category further comprises assessing time required for each ASR engine to recognize speech utterances.
6. (original) The method of claim 1 further comprising:
 - receiving a second speech utterance from a second user;
 - classifying the second speech utterance into one of the categories; and
 - selecting the ASR engine assigned to the category to which the second speech utterance is classified to automatically recognize the speech utterance, wherein the ASR engine assigned to the category to which the second speech utterance is classified is different from the ASR engine assigned to the category to which the first speech utterance is classified.
7. (original) The method of claim 6 wherein the first speech utterance is classified into a male category, and the second speech utterance is classified into a female category.
8. (currently amended) An automatic speech recognition (ASR) system comprising:
 - means for receiving ground truths with correct text for different speech utterances;
 - means for processing the different speech utterances at different ASR engines;
 - means for comparing output from each of the different ASR engines with the ground truths to develop a ranking matrix that includes ~~determine~~ ranks of the different ASR engines for accuracy in recognizing the different speech utterances;
 - means for processing a digital input signal from an utterance of a user;
 - means for extracting an age and a gender of the user ~~information~~ from characteristics of the utterance of the user ~~content of the input signal, the information including characteristics of both the utterance and the user~~; and

means for using the age and the gender of the user-characteristics to consult the ranking matrix and select a best performing ASR engine from the different ASR engines to recognize the utterance of the user, wherein the means for selecting a best performing ASR engine utilizes the ranks of the different ASR engines to select the best performing ASR engine.

9. (currently amended) The ASR system of claim 8, wherein the ranking matrix is a table that defines which ASR engine or combination of ASR engines has a best accuracy for different ages and genders of users further comprising means for storing a ranking matrix, the ranking matrix comprising a plurality of different categories of speech signals and a plurality of different ASR engine rankings corresponding to the plurality of different categories.

10. (original) The system of claim 9 wherein the different categories are selected from the group consisting of gender, noise level, and pitch.

11. (original) The system of claim 9 wherein the different ASR engines comprise single ASR engines and multiple ASR engines combined together.

12. (original) The system of 9 wherein the plurality of different ASR engine rankings are derived from statistical analysis.

13. (original) The system of claim 12 wherein the statistical analysis comprises assessing accuracy of speech recognition of different ASR engines with different speech signals.

14. (currently amended) A system, comprising:

 a computer system having a central processing unit coupled to a memory and extraction algorithm; and

 a plurality of different automatic speech recognition (ASR) engines coupled to the computer system, wherein the computer system:

 receives ground truths with correct text for different speech utterances,

processes the different speech utterances at the different ASR engines, compares output from each of the different ASR engines with the ground truths to develop a ranking matrix that includes determine ranks of the different ASR engines for accuracy in recognizing the different speech utterances,

receives a speech utterance from a speaker,
analyze characteristics of the speech utterance to determine an age and a gender of the speaker, and

extracts characteristics about the speaker from content of the speech utterance, and

uses the ranks and the age and the gender of the user characteristics to select from the ranking matrix one of the ASR engines that will most accurately recognize the speech utterance.

15. (currently amended) The system of claim 14 wherein the ranking matrix is a table that defines which ASR engine or combination of ASR engines has a best accuracy for different ages and genders of users extraction algorithm extracts data from the speech utterance to classify the speech utterance into a category selected from the group consisting of male and female.

16. (original) The system of claim 14 wherein the computer system selects the ASR engine that has the least word error rate for the speech utterance.

17. (original) The system of claim 14 further comprising at least three different ASR engines and at least three different combination schemas of ASR engines to represent a total of at least six different ASR engines.

18. (original) The system of claim 14 further comprising a telephone network comprising at least one switching service point coupled to the computer system.

19. (original) The system of claim 18 further comprising at least one communication device in communication with the switching service point to provide the speech

utterance.

20. (original) The system of claim 14 wherein the memory comprises a ranking table with a plurality of different categories of speech signals and a plurality of different ASR engine rankings corresponding to the plurality of different categories.